



# ENERGY STAR® Application for Certification

# 84

ENERGY STAR®  
Score<sup>1</sup>

## 501 Boylston

Registry Name: 501 Boylston Street

Property Type: Office

Gross Floor Area (ft²): 682,117

Built: 1940

For Year Ending: 07/31/2016<sup>2</sup>

Date Application Becomes Ineligible: 11/28/2016

1. The ENERGY STAR Score is based on total source energy. A score of 75 is the minimum to be eligible for the ENERGY STAR.  
2. Applications must be submitted to EPA within 120 days of the Year Ending Date. The award is not final until approval is received from EPA.



Please use the Licensed Professional's Guide to the ENERGY STAR® for Commercial Buildings for reference in completing this checklist  
(<http://www.energystar.gov/lpguide>).

## Property & Contact Information

### Property Address

501 Boylston Street  
501 Boylston Street  
Boston, Massachusetts 02116

### Property Owner

TIAA-CREF  
501 Boylston Street  
Boston, MA 02116  
(617) 247-3676

### Primary Contact

Christopher Davidson  
6 Union Street  
Natick, MA 01760  
508-647-9200  
[cdavidson@engsolutions.com](mailto:cdavidson@engsolutions.com)

Property ID: 1188339

Boston Energy Reporting ID:

0501296002 0501296004 0501296006

## 1. Review of Whole Property Characteristics

### Basic Property Information

#### 1) Property Name for Registry: 501 Boylston Street

Is this the official name to be displayed in the Registry of ENERGY STAR Certified Buildings and Plants?

☒ Yes

☐ No

If "No", please specify: \_\_\_\_\_

#### 2) Property Type: Office

Is this an accurate description of the primary use of this property?

☒ Yes

☐ No

**3) Location:**

501 Boylston Street  
Boston, Massachusetts 02116

☒ Yes ☐ No

Is this correct and complete?

**4) Gross Floor Area:** 682,117 ft<sup>2</sup>

Does this represent the entire property? (i.e., no part of the building/property was excluded/subtracted from the total) If "no" please specify what space has been excluded.

☒ Yes ☐ No

**5) Average Occupancy:** (b) (4)

Is this occupancy accurate for the entire 12 month period being assessed?

☒ Yes ☐ No

**6) Number of Buildings:** 1

Does this number accurately represent all structures?

☒ Yes ☐ No

Notes:

### Indoor Environmental Standards

**1) Ventilation for Acceptable Indoor Air Quality**

Does this property meet the minimum ventilation rates according to ANSI/ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality?

☒ Yes ☐ No

**2) Acceptable Thermal Environmental Conditions**

Does this property meet acceptable thermal environmental conditions according to ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy?

☒ Yes ☐ No

**3) Adequate Illumination**

Does this property meet the minimum illumination levels as recommended by the Illuminating Engineering Society of North America (IESNA) Lighting Handbook?

☒ Yes ☐ No

Notes:



## 2. Review of Property Use Details

### Parking: Parking Garage Space

☆ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Open Parking Lot Size: 0 ft<sup>2</sup>

Is this the total area that is lit and used for parking vehicles? Open Parking Lot Size refers specifically to open area, which may include small shading covers but does not include any full structures with roofs. Parking lot size may include the area of parking spots, lanes, and driveways.

☒ Yes ☐ No

★ 2) Partially Enclosed Parking Garage Size: 0 ft<sup>2</sup>

Is this the total area of parking structures that are partially enclosed? This includes parking garages where each level is covered at the top, but the walls are partially or fully open.

☒ Yes ☐ No

★ 3) Completely Enclosed Parking Garage Size: 44,886 ft<sup>2</sup>

Is this the total area of parking structures that are completely enclosed on all four sides and have a roof? This includes underground parking or fully enclosed parking on the first few stories of a building.

☒ Yes ☐ No

★ 4) Supplemental Heating: No

Does the parking garage have a heating system to pre-heat ventilation air and/or maintain a minimum temperature during winter months?

☐ Yes ☒ No

Notes:

### Swimming Pool: Pool Space

☆ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Approximate Pool Size: Short Course (25 yards x 20 yards)

Is this the approximate size of either indoor or outdoor swimming pools? Many pools have unique/nonstandard shapes. You should select the size that is closest to the pool's size.

☒ Yes ☐ No

★ 2) Location of Pool: Indoor

Is this the location of the pool?

☒ Yes ☐ No

Notes:

**Retail Store: (b) (4)**

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

**★ 1) Gross Floor Area: 6,802**

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No**★ 2) Weekly Operating Hours: (b) (4)**

Is this the total number of hours per week that the property is open to the public?

☒ Yes ☐ No**★ 3) Number of Workers on Main Shift: (b) (4)**

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No**★ 4) Number of Computers: (b) (4)**

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No**★ 5) Number of Cash Registers: (b) (4)**

Is this the total number cash registers? Cash registers are defined as physical machines that are used primarily for conducting transactions and indicating to customers the amounts of individual sales; they record and total receipts, may automatically calculate the change due, and often include a money drawer from which to make change. Handheld point of sale devices should not be included.

☒ Yes ☐ No**★ 6) Number of Open or Closed Refrigeration/Freezer Units: (b) (4)**☒ Yes ☐ No



Is this the count of open or closed cases that are used for the sale or storage of perishable goods? This includes display-type refrigerated open or closed cases and cabinets as well as display-type freezer units typically found on a sales floor. Each case or cabinet section, typically 4 to 12 feet in length, should be considered 1 unit. Include those cases located inside and immediately adjacent to the building. These units may be portable or permanent, and may have doors, plastic strips, or other flexible cover. This count should not include vending machines.

★ 7) Number of Walk-in Refrigeration/Freezer Units: (b) (4)

Is this the total count of walk-in units at the property? Walk-in Refrigeration/Freezers are typically very large units located in storage areas or commercial kitchens that would not be accessible to all building occupants. This count should only include large storage units that a person actually walks into in order to store or retrieve perishable goods.

☒ Yes ☐ No

★ 8) Single Store: 100% Yes

Is this property a single store?

☒ Yes ☐ No

★ 9) Exterior Entrance to the Public: 100% Yes

Does the property have an exterior entrance through which customers enter from the outside? This should be marked as No if patrons must enter through an interior entrance, such as from within a mall or an atrium in a mixed use establishment.

☒ Yes ☐ No

★ 10) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 11) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Retail Store: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 7,100

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher

☒ Yes ☐ No



levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is open to the public?

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Number of Cash Registers: (b) (4)

Is this the total number cash registers? Cash registers are defined as physical machines that are used primarily for conducting transactions and indicating to customers the amounts of individual sales; they record and total receipts, may automatically calculate the change due, and often include a money drawer from which to make change. Handheld point of sale devices should not be included.

☒ Yes ☐ No

★ 6) Number of Open or Closed Refrigeration/Freezer Units: (b) (4)

Is this the count of open or closed cases that are used for the sale or storage of perishable goods? This includes display-type refrigerated open or closed cases and cabinets as well as display-type freezer units typically found on a sales floor. Each case or cabinet section, typically 4 to 12 feet in length, should be considered 1 unit. Include those cases located inside and immediately adjacent to the building. These units may be portable or permanent, and may have doors, plastic strips, or other flexible cover. This count should not include vending machines.

☒ Yes ☐ No

★ 7) Number of Walk-in Refrigeration/Freezer Units: (b) (4)

Is this the total count of walk-in units at the property? Walk-in Refrigeration/Freezers are typically very large units located in storage areas or commercial kitchens that would not be accessible to all building occupants. This count should only include large storage units that a person actually walks into in order to store or retrieve perishable goods.

☒ Yes ☐ No

★ 8) Single Store: 100% Yes

Is this property a single store?

☒ Yes ☐ No

★ 9) Exterior Entrance to the Public: 100% Yes

Does the property have an exterior entrance through which customers enter from the outside? This should be marked as No if patrons must enter through an interior entrance, such as from within a mall or an atrium in a mixed use establishment.

☒ Yes ☐ No

★ 10) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

## ★ 11) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment?  
This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

## Office: Office Space

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

## ★ 1) Gross Floor Area: 485,982

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No

**NOTE:** This use detail was changed during the year ending 07/31/2016. The value above represents a time-weighted average of the values over this timeframe. The following table outlines the history of the changes resulting in the value displayed above:

Timeframe	Value
08/01/2015 – 03/13/2016	476,935 ft <sup>2</sup>
03/14/2016 – 07/31/2016	500,587 ft <sup>2</sup>

## ★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

## ★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No



**NOTE:** This use detail was changed during the year ending 07/31/2016. The value above represents a time-weighted average of the values over this timeframe. The following table outlines the history of the changes resulting in the value displayed above:

Timeframe	Value
08/01/2015 – 03/13/2016	(b) (4)
03/14/2016 – 04/30/2016	(b) (4)
05/01/2016 – 07/31/2016	(b) (4)

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

**NOTE:** This use detail was changed during the year ending 07/31/2016. The value above represents a time-weighted average of the values over this timeframe. The following table outlines the history of the changes resulting in the value displayed above:

Timeframe	Value
08/01/2015 – 04/30/2016	(b) (4)
05/01/2016 – 07/31/2016	(b) (4)

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Office: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 0

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the

☒ Yes ☐ No



base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Office: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 0

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes

☒ Yes ☐ No

all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Office: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 924

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross

☒ Yes ☐ No



Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Office: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 1,598

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s)

☒ Yes ☐ No



such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Other: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) **Gross Floor Area: 2,666**

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes    ☐ No

Notes:

Other: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) **Gross Floor Area: 1,264**

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes    ☐ No

Notes:

Personal Services (Health/Beauty, Dry Cleaning, etc.): (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.



## ★ 1) Gross Floor Area: 35,908

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No

Notes:

Office: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

## ★ 1) Gross Floor Area: 44,114

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No

**NOTE:** This use detail was changed during the year ending 07/31/2016. The value above represents a time-weighted average of the values over this timeframe. The following table outlines the history of the changes resulting in the value displayed above:

Timeframe	Value
08/01/2015 – 09/28/2015	53,161 ft <sup>2</sup>
09/29/2015 – 03/13/2016	53,161 ft <sup>2</sup>
03/14/2016 – 07/31/2016	29,509 ft <sup>2</sup>

## ★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is occupied by the majority of the employees? It does not include hours when the HVAC system is starting up or shutting down, or when property is occupied only by maintenance, security, cleaning

☒ Yes ☐ No



staff, or other support personnel. For properties with a schedule that varies during the year, use the schedule most often followed.

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Other: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 4,200

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No

**Notes:****Retail Store:** (b) (4)

☆ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

☆ 1) **Gross Floor Area:** 38,425

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No☆ 2) **Weekly Operating Hours:** (b) (4)

Is this the total number of hours per week that the property is open to the public?

☒ Yes ☐ No☆ 3) **Number of Workers on Main Shift:** (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No☆ 4) **Number of Computers:** (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No☆ 5) **Number of Cash Registers:** (b) (4)

Is this the total number cash registers? Cash registers are defined as physical machines that are used primarily for conducting transactions and indicating to customers the amounts of individual sales; they record and total receipts, may automatically calculate the change due, and often include a money drawer from which to make change. Handheld point of sale devices should not be included.

☒ Yes ☐ No☆ 6) **Number of Open or Closed Refrigeration/Freezer Units:** (b) (4)☒ Yes ☐ No



Is this the count of open or closed cases that are used for the sale or storage of perishable goods? This includes display-type refrigerated open or closed cases and cabinets as well as display-type freezer units typically found on a sales floor. Each case or cabinet section, typically 4 to 12 feet in length, should be considered 1 unit. Include those cases located inside and immediately adjacent to the building. These units may be portable or permanent, and may have doors, plastic strips, or other flexible cover. This count should not include vending machines.

★ 7) Number of Walk-in Refrigeration/Freezer Units: (b) (4)

Is this the total count of walk-in units at the property? Walk-in Refrigeration/Freezers are typically very large units located in storage areas or commercial kitchens that would not be accessible to all building occupants. This count should only include large storage units that a person actually walks into in order to store or retrieve perishable goods.

☒ Yes ☐ No

★ 8) Single Store: 100% Yes

Is this property a single store?

☒ Yes ☐ No

★ 9) Exterior Entrance to the Public: 100% Yes

Does the property have an exterior entrance through which customers enter from the outside? This should be marked as No if patrons must enter through an interior entrance, such as from within a mall or an atrium in a mixed use establishment.

☒ Yes ☐ No

★ 10) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

★ 11) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment? This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Retail Store (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 47,191

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable, but rather includes all area inside the building(s). Leasable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher

☒ Yes ☐ No

levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the property is open to the public?

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Number of Cash Registers: (b) (4)

Is this the total number cash registers? Cash registers are defined as physical machines that are used primarily for conducting transactions and indicating to customers the amounts of individual sales; they record and total receipts, may automatically calculate the change due, and often include a money drawer from which to make change. Handheld point of sale devices should not be included.

☒ Yes ☐ No

★ 6) Number of Open or Closed Refrigeration/Freezer Units: (b) (4)

Is this the count of open or closed cases that are used for the sale or storage of perishable goods? This includes display-type refrigerated open or closed cases and cabinets as well as display-type freezer units typically found on a sales floor. Each case or cabinet section, typically 4 to 12 feet in length, should be considered 1 unit. Include those cases located inside and immediately adjacent to the building. These units may be portable or permanent, and may have doors, plastic strips, or other flexible cover. This count should not include vending machines.

☒ Yes ☐ No

★ 7) Number of Walk-in Refrigeration/Freezer Units: (b) (4)

Is this the total count of walk-in units at the property? Walk-in Refrigeration/Freezers are typically very large units located in storage areas or commercial kitchens that would not be accessible to all building occupants. This count should only include large storage units that a person actually walks into in order to store or retrieve perishable goods.

☒ Yes ☐ No

★ 8) Single Store: 100% Yes

Is this property a single store?

☒ Yes ☐ No

★ 9) Exterior Entrance to the Public: 100% Yes

Does the property have an exterior entrance through which customers enter from the outside? This should be marked as No if patrons must enter through an interior entrance, such as from within a mall or an atrium in a mixed use establishment.

☒ Yes ☐ No

★ 10) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No



★ 11) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment?  
This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

Bank Branch: (b) (4)

★ This Use Detail is used to calculate the 1-100 ENERGY STAR Score.

★ 1) Gross Floor Area: 5,943

Is this the total size, as measured between the principal exterior surfaces of the enclosing fixed walls of the building(s)? This includes all areas inside the building(s) such as: occupied tenant areas, common areas, meeting areas, break rooms, restrooms, elevator shafts, mechanical equipment areas, and storage rooms. Gross Floor Area should not include interstitial plenum space between floors, which may house pipes and ventilation. Gross Floor Area is not the same as rentable space, but rather includes all area inside the building(s). Rentable space would be a sub-set of Gross Floor Area. In the case where there is an atrium, you should count the Gross Floor Area at the base level only. Do not increase the size to accommodate open atrium space at higher levels. The Gross Floor Area should not include any exterior spaces such as balconies or exterior loading docks and driveways.

☒ Yes ☐ No

★ 2) Weekly Operating Hours: (b) (4)

Is this the total number of hours per week that the bank branch is open to the public?

☒ Yes ☐ No

★ 3) Number of Workers on Main Shift: (b) (4)

Is this the total number of workers present during the primary shift? This is not a total count of workers, but rather a count of workers who are present at the same time. For example, if there are two daily eight hour shifts of 100 workers each, the Number of Workers on Main Shift value is 100. Number of Workers on Main Shift may include employees of the property, sub-contractors who are onsite regularly, and volunteers who perform regular onsite tasks. Number of Workers should not include visitors to the buildings such as clients, customers, or patients.

☒ Yes ☐ No

★ 4) Number of Computers: (b) (4)

Is this the total number of computers, laptops, and data servers at the property? This number should not include tablet computers, such as iPads, or any other types of office equipment.

☒ Yes ☐ No

★ 5) Percent That Can Be Heated: (b) (4)

Is this the total percentage of the property that can be heated by mechanical equipment?

☒ Yes ☐ No

## ★ 6) Percent That Can Be Cooled: (b) (4)

Is this the total percentage of the property that can be cooled by mechanical equipment?  
This includes all types of cooling from central air to individual window units.

☒ Yes ☐ No

Notes:

## 3. Review of Energy Consumption

## Data Overview

## Site Energy Use Summary

Electric - Grid (kBtu) (b) (4)  
Natural Gas (kBtu) (b) (4)  
Total Energy (kBtu) 57,374,050.4

## Energy Intensity

Site (kBtu/ft<sup>2</sup>) 84.1  
Source (kBtu/ft<sup>2</sup>) 179.7

## National Median Comparison

National Median Site EUI (kBtu/ft<sup>2</sup>) 133.9  
National Median Source EUI (kBtu/ft<sup>2</sup>) 286.1  
% Diff from National Median Source EUI -37.2%

## Emissions (based on site energy use)

Greenhouse Gas Emissions (Metric Tons CO<sub>2</sub>e) 4,349

## Power Generation Plant or Distribution Utility:

NSTAR Co [Eversource Energy]

Note: All values are annualized to a 12-month period. Source Energy includes energy used in generation and transmission to enable an equitable assessment.

## Summary of All Associated Meters

The following meters are associated with the property, meaning that they are added together to get the total energy use for the property. Please see additional tables in this checklist for the exact meter consumption values.

Meter Name	Fuel Type	Start Date	End Date	Associated With
(b) (4)	Natural Gas	01/31/2006	In Use	501 Boylston
(b) (4)	Electric	12/14/2005	In Use	501 Boylston
(b) (4)	Electric	12/15/2005	In Use	501 Boylston

## Total Energy Use

☒ Yes ☐ No

Do the meters shown above account for the total energy use of this property during the reporting period of this application?

## Additional Fuels

☒ Yes ☐ No



Do the meters above include all fuel types at the property? That is, no additional fuels such as district steam, generator fuel oil have been excluded.

### On-Site Solar and Wind Energy

☒ Yes ☐ No

Are all on-site solar and wind installations reported in this list (if present)? All on-site systems must be reported.

Notes:

Natural Gas Meter: (b) (4) (therms)

Associated With: 501 Boylston

Start Date	End Date	Usage
08/01/2015	08/31/2015	(b) (4)
09/01/2015	09/30/2015	
10/01/2015	10/31/2015	
11/01/2015	11/30/2015	
12/01/2015	12/31/2015	
01/01/2016	01/31/2016	
02/01/2016	02/29/2016	
03/01/2016	03/31/2016	
04/01/2016	04/30/2016	
04/30/2016	05/31/2016	
05/31/2016	06/30/2016	
06/30/2016	07/31/2016	
07/31/2016	08/31/2016	

Total Consumption (therms):

Total Consumption (kBtu (thousand Btu)):

Total Energy Consumption for this Meter

☒ Yes ☐ No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

Electric Meter: (b) (4) (kWh (thousand Watt-hours))

Associated With: 501 Boylston

Start Date	End Date	Usage	Green Power?
07/21/2015	08/18/2015	(b) (4)	No
08/18/2015	09/20/2015	(b) (4)	No
09/20/2015	10/20/2015	(b) (4)	No
10/20/2015	11/19/2015	(b) (4)	No
11/19/2015	12/21/2015	(b) (4)	No
12/21/2015	01/21/2016	(b) (4)	No
01/21/2016	02/22/2016	(b) (4)	No
02/23/2016	03/22/2016	(b) (4)	No
03/23/2016	04/19/2016	(b) (4)	No
04/19/2016	05/18/2016	(b) (4)	No
05/18/2016	06/19/2016	(b) (4)	No
06/19/2016	07/20/2016	(b) (4)	No
07/20/2016	08/16/2016	(b) (4)	No

Total Consumption (kWh (thousand Watt-hours)):

Total Consumption (kBtu (thousand Btu)):

(b) (4)

Total Energy Consumption for this Meter

☒ Yes ☐ No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:



Electric Meter: (b) (4) (kWh (thousand Watt-hours))

Associated With: 501 Boylston

Start Date	End Date	Usage	Green Power?
07/21/2015	08/18/2015	(b) (4)	No
08/18/2015	09/20/2015		No
09/20/2015	10/20/2015		No
10/20/2015	11/19/2015		No
11/19/2015	12/21/2015		No
12/21/2015	01/21/2016		No
01/21/2016	02/22/2016		No
02/22/2016	03/23/2016		No
03/23/2016	04/19/2016		No
04/19/2016	05/18/2016		No
05/18/2016	06/19/2016		No
06/19/2016	07/20/2016		No
07/20/2016	08/16/2016		No

Total Consumption (kWh (thousand Watt-hours)):

Total Consumption (kBtu (thousand Btu)):

(b) (4)

Total Energy Consumption for this Meter

☒ Yes
☐ No

Do the fuel consumption totals shown above include consumption of all energy tracked through this meter that affect energy calculations for the reporting period of this application (i.e., do the entries match the utility bills received by the property)?

Notes:

#### 4. Signature & Stamp of Verifying Licensed Professional

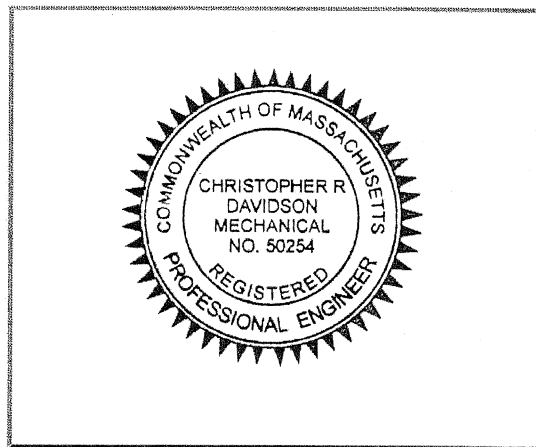
CHRISTOPHER DAVIDSON (Name) visited this site on 27 SEP 2016 (Date). Based on the conditions observed at the time of the visit to this property, I verify that the information contained within this application is accurate and in accordance with the Licensed Professional Guide.

Signature: Christopher Davidson Date: 6 OCT 2016

**Licensed Professional**

License: 50254 in MA

Christopher Davidson  
6 Union Street  
Natick, MA 01760  
508-647-9200  
cdavidson@engsolutions.com



**Professional Engineer Stamp**

**NOTE:** When applying for the ENERGY STAR, the signature of the Verifying Professional must match the stamp.

## 5. Signatory Agreement

I hereby nominate the above described property for award of the ENERGY STAR. I have provided a copy of the Licensed Professionals Guide to the ENERGY STAR for Commercial Buildings to our Licensed Professional (LP) for reference. As documented by the above checklist, this property meets the conditions necessary to qualify as ENERGY STAR. I am submitting this application within four months of the Year Ending Date (July 31, 2016) used to generate the application. I will assist EPA, if requested, in verifying any data included in this application. Furthermore, I agree to associate the ENERGY STAR logo only with this property and to adhere to the ENERGY STAR Identity Guidelines.

Signature (must be a direct employee of the building owner/manager): Nick Trocki Date: 10-7-16

Signatory Name: Nick Trocki

Property Owner: TIAA-CREF

The government estimates the average time needed to fill out this form is 6 hours (includes the time for entering energy data, Licensed Professional facility inspection, and notarizing the SEP) and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S. EPA (2822T), 1200 Pennsylvania Ave. NW, Washington, D.C. 20460